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APPLICATION NO.	FILING DATE	FIRȘT NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/676,170	10/02/2003	Ross J. Hamel	SYNT-0108	6800	
53443 WOODCOCK	7590 01/23/2008 WASHBURN LLP		EXAMINER		
CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET			WERNER, JONATHAN S		
	HA, PA 19104-2891		ART UNIT PAPER NUMBER		
			3732		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

			- 1
	Application No.	Applicant(s)	
	10/676,170	. HAMEL, ROSS J.	
. Office Action Summary	Examiner	Art Unit	
•	Jonathan Werner	3732	•
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING [2]  - Extensions of time may be available under the provisions of 37 CFR 1, after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION  136(a). In no event, however, may a reply be to the second of the second	N. imely filed in the mailing date of this communication. ED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 10/3	31/07.		
·= · · · · - · - · - · - · - · · · - · - ·	s action is non-final.		
3) Since this application is in condition for allowa	ance except for formal matters, pr	osecution as to the merits is	
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.	
Disposition of Claims			
4) Claim(s) <u>1,4-7,9-17,19,21,23,25-36,40,41,44-</u>	50 and 52-59 is/are pending in th	e application.	
4a) Of the above claim(s) is/are withdra	• • •	,	
5) Claim(s) is/are allowed.			
6) Claim(s) 1,4-7,9-17,19,21,23,25-36,40-41,44-	-50,52-59 is/are rejected.		
7) Claim(s) is/are objected to.	,		
8) Claim(s) are subject to restriction and/	or election requirement.		
Application Papers		•	
9) The specification is objected to by the Examin	er.	. ·	٠.
10) The drawing(s) filed on is/are: a) ac		Examiner.	
Applicant may not request that any objection to the	e drawing(s) be held in abeyance. So	ee 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct	ction is required if the drawing(s) is o	bjected to. See 37 CFR 1.121(d).	
11) ☐ The oath or declaration is objected to by the E	xaminer. Note the attached Offic	e Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:	n priority under 35 U.S.C. § 119(a	a)-(d) or (f).	
<ol> <li>Certified copies of the priority documer</li> </ol>	nts have been received.		
<ol><li>Certified copies of the priority document</li></ol>	nts have been received in Applica	tion No	·
<ol><li>Copies of the certified copies of the price</li></ol>	ority documents have been received	ed in this National Stage	
application from the International Burea	•		
* See the attached detailed Office action for a lis	t of the certified copies not receive	red.	
		•	
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) Interview Summar		
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> </ul>	Paper No(s)/Mail l 5) Notice of Informal		
Paper No(s)/Mail Date	6) Other:	• • • • • • • • • • • • • • • • • • • •	

#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/31/07 has been entered.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 4-7, 9-10, 14-17, 19, 21, 23, 25-29, and 52-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Wells (US 5,904,650). Wells discloses a surgical retractor (10) comprising a handle (70) having a longitudinal axis with proximal and distal ends (see Figures 1-3); a first coupling mechanism that comprises a knob (40) having a bore (46) with internal threads at each end (i.e. see Figure 3), wherein said coupling mechanism is coupled to the proximal end of the handle (70) via threads (69), and wherein the bore is rotatable about the longitudinal axis of the handle also via threads (69); and a blade member (20) having a proximal end and a distal end (see

Figures 1-3), wherein said blade member comprises a coupling element (threaded region 28, Figure 3) which is configured and dimensioned to be received in the bore of the knob (40) as shown in Figures 2-3. Additionally, Examiner notes that rotation of the knob (40) causes the threaded coupling element (28) to advance into the threaded portion (44) of the bore of knob (Figures 2-3). The threaded coupling element (28) of the blade comprises a shaft as shown in Figures 2-3, and wherein the bore has mating threads for receiving said shaft. Furthermore, the coupling element of the blade has an aperture (through the threaded shaft, Figures 2-3; column 4, lines 50-51) which is capable of passing a surgical tool therethrough. The blade of Wells also has a structure (i.e. 26/29) at the distal end which can be used to stabilize the retractor against bone during an operation. Wells discloses a second coupling mechanism (68) located on the handle, which couples to a coupling member (50) for supporting a surgical instrument such as an endoscope (column 4, lines 6-19). As shown in Figure 2, an endoscope located in a recess of a second member (i.e. receptacle 30) can be positioned to provide a view of the distal end of the retractor blade since said distal end of the blade extends past the distal end of said receptacle. Figures 2-3 further shown that the coupling member is telescopically received in the handle. Additionally, Examiner notes the coupling member can be adapted to clamp a portion of the surgical instrument depending on the corresponding size of the instrument within the recess. Wells discloses that surgical instruments other than endoscopes (such as a blade) can be coupled to the retractor via the first coupling mechanism (column 4, lines 23-24).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 11-13, 31-36, 40-41, 44-47, and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wells in view of Greenberg (US 5,558,622). Wells discloses the claimed invention as previously described, with the exception of "C" or "L" hook shapes at the distal end of the blade for stabilization against bone. Greenberg discloses a surgical retractor with both "C" and "L" hook-shaped distal ends of the retractor blade that help stabilize the blade against bone (Fig. 5, #58; Fig. 17, #M, and Fig. 20, #71B). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the retractor blade of Wells to a "C" shape or an "L" shape as taught by Greenberg in order to allow for stabilization against bone. Wells also fails to explicitly disclose the steps of creating an appropriate incision in a patient's tissue necessary for the use of a retractor. However, Greenberg discloses a method for treating a bone that includes providing the surgical retractor, making an incision in the soft tissue and elevating the tissue off the bone (Fig. 17, S, SI, OI and M), passing a portion of the blade through the incision and retracting the tissue (Fig. 17, OI), circumventing at least part of the bone with a portion of the blade and stabilizing a portion of the blade on the bone (Fig. 17, #'s 58, 59, and M), and performing a surgical procedure on the bone (Fig. 17, D and P). Therefore, it would have been obvious to

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one having ordinary skill in the art at the time of Applicant's invention to make such an incision in the soft tissue in order to provide a working area for insertion of the retractor during a procedure as taught by Greenberg. Additionally, part of the procedure involves using a surgical tool (D) to pass an orthopedic implant (P) through the cavity (SI) and the aperture of the blade (Fig. 17, #60). The surgical instrument can be a drill (and therefore a burr) (Column 6, lines 22-27) inserted through a drill guide or cannula (Column 2, lines 14-19). The implant secured to the bone can be a bone fastener or a screw (Column 6, lines 22-27) and used in an orthognathic procedure to fixate a fracture (Claim 32) on a bone segment (mandible) that comprises a condylar neck and a ramus.

- 4. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wells in view of Hipps et al. (US 6,228,025). Wells discloses the claimed invention as described in detail above, with the exception of having a second handle transverse to the longitudinal axis. Hipps et al. discloses as surgical retractor with a second handle transverse to the longitudinal axis of the first handle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the retractor of Wells with a second transverse handle, as taught by Hipps et al., since adding an additional handle will increase the ability to manipulate and more securely grasp the retractor.
- 5. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wells in view of Greenberg, as applied to claim 44 above, and further in view of Swaniger (US

4,769,011). Wells and Greenberg disclose the claimed methods as described above, with the exception of using a grafting procedure. Swaniger discloses methods for mandibular surgery that are well known in the art including a grafting procedure (Column 1, lines 21-24), using a biocompatible bone filler material (Column 1, lines 30-38), and the use of a syringe to implant the bone filler material (Column 2, lines 10-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform a grafting procedure as taught by Swaniger in order to augment the alveolar ridge.

## Response to Arguments

6. Applicant's amendments to the Abstract have been accepted, the objection of which has been withdrawn. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Regardless, Examiner points out that while an Applicant can act as his or her own lexicographer, the names of certain reference elements described in the prior art are not required to be the same as the corresponding names of reference elements of the present invention in order for said prior art to read on the present invention. For example, even though Wells calls reference element 70 a "tightener," it is clear that this reference is sufficient to act as the presently claimed "handle" of Applicant's invention as described in the rejection above. In this regard, Examiner notes that, as interpreted in the rejection above, the coupling system of Wells comprising knob (40) and bore (46) with internal threads acts in the same manner as that of the present invention, and wherein knob

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(40) of Wells is representative of the same basic shape of Applicant's disclosed knob.

Additionally, Merriam-Webster dictionary defines a knob as a small rounded handle. In

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this case, element 40 is a gripable cylindrical member with internal threads that acts like

and serves the same purpose as that of Applicant's knob – namely to secure the blade

(20) member thereto via the blade member's coupling element (28).

7. Next, in regard to Wells, Applicant remarks that "the receptacle 30 and not the

blade 20 has the alleged coupling element." However, Examiner respectfully disagrees

with this assertion. Although receptacle (30) does indeed have a coupling element as

pointed out by Applicant, blade (20) also has a coupling element (i.e. the threaded

region of element 28) as described in the rejection above. This coupling element (28)

as shown in Figures 2-3 is configured and dimensioned to be received in the bore (46)

of the knob (40) such that rotation of said knob causes the coupling element to advance

within the bore (i.e. the threaded portion of coupling element 28 can advance within

bore 46 via the internal threads of the bore at end 44).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jonathan Werner whose telephone number is (571)

272-2767. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Cary E. O'Connor/ Primary Examiner Art Unit 3732

Jonathan Werner

**Examiner**